Technical Branch
Science & Engineering Group
Para-Professional Engineering Series

ENGINEERING TECHNICIAN IV

04/98 (TLW)

Summary

Under direction, plan and coordinate work of assigned subordinates or personally perform the most difficult or unusual phases of providing technical support.

Typical Duties

Review, or prepare design plans in support of construction, site development, streets, drainage, water or sewer line, or storm drain engineering project according to specifications and in compliance with pertinent codes and ordinances. Involves: checking for adherence with technical procedures and engineering instructions; verifying survey measurements, and existing facility, utility, and structure data; recommending alternatives regarding technical aspects of plans to meet planning, design and cost problems encountered; analyzing plans for compliance with applicable ordinances, regulations, specifications; assisting technicians in overcoming difficulties encountered in drafting and computational work.

Coordinate and oversee site inspection and surveying. Involves: perform inspections of project construction to verify data and compliance with contract specifications; measuring, observing and discussing progress of work and related problems with colleagues and contractor personnel; assisting technicians in overcoming difficulties encountered in gathering inspection data and resolving disputes; ensuring compliance with professional and technical standards; scheduling and briefing crews; monitoring progress of job; verifying work conforms to developers contract; preparing completion certificate; issuing and tracking equipment.

Perform special investigations as requested. Involves: researching controversial property line questions; gathering statistical and engineering data and reviewing sources such as records, files and drawings; conferring with interested department personnel and other agencies; developing technical corrective actions and alternatives and presenting recommends.

Overseeing record management for public works projects and property assessments. Involves: ensuring preparation of construction documents including design data including drawings, specifications and grading requirements and legal descriptions for acquisition of land for City's right of way; tracking project status; conducting final reviews of contractor packets for project bid proposals; making final check on pay estimates and contractor invoices; directing personnel engaged in retrieval of information.

Supervise assigned personnel. Involves: scheduling, assigning, instructing, guiding, checking and evaluating work; arranging for or engaging in employee training and development; enforcing personnel rules and regulations, standards of conduct, work attendance, and safe work practices; counseling, motivating and maintaining harmonious working relationships among subordinates; recommending staffing and employee status changes; interviewing applicants and recommending selection.

Perform related duties as assigned. Involves: performing any duties of supervisor, coworkers or subordinates, if required, during temporary absences sufficient to maintain continuity of normal operations; overseeing and maintaining assigned unit records; preparing specified information for use in development of unit budget proposals; preparing and reviewing routine and special reports; scheduling and organizing the Architectural/Engineering Selection committee meetings.

Minimum Qualifications

<u>Training and Experience</u>: Completion of an Associate's Degree in Engineering Technology, Drafting Technology or related field and six (6) years of increasingly responsible para-professional engineering experience; or an equivalent combination of training and experience.

<u>Knowledge</u>, <u>Skills and Abilities</u>: Comprehensive knowledge of: construction, land development or related engineering technology principles, procedures and techniques; field surveying. Good knowledge of: mathematics related to engineering; manual and computer aided design drafting (CADD) techniques.

Ability to: conceptualize and draft design drawings based on engineering requirements, and develop applications of technical procedures in support of engineering projects; simultaneously monitor details of numerous small projects; identify variances from plan specifications to resolve problems and minor disputes regarding discrepancies between designs and construction; enforce codes with firmness, tact and impartiality; prepare technical reports, spreadsheets, charts and graphs pertaining to assigned activities using a variety of computer software applications; prepare construction and equipment cost estimates and specifications; firmly and impartially exercise delegated authority to lead, motivate, train and evaluate assigned personnel; express oneself clearly and concisely, both

orally and in writing, when responding to public information requests as authorized; establish and maintain effective working relationships with fellow employees, contractors and the general public.

Skill in the safe operation and care of: personal computer or network work station, including CADD, word processing, spreadsheets and database software; standard drafting instruments; surveying instrumentation and time and distance measuring devices; motor vehicle through city traffic.

Physical Requirements: Frequent: close visual concentration to draft design drawings; exposure to adverse weather conditions; walking, standing and climbing on rough terrain and construction sites. Occasional: stooping, bending, lifting and carrying objects and equipment (up to 30 lbs).

Special Requirements: Subject to call back, and working flexible hours, weekends, holidays and mandatory overtime, as required.

Licenses and Certificates: Texas Class "C" Driver's License or equivalent from State of residence.

